ABSTRACT OF THE DISCLOSURE

In an embodiment, a method includes receiving a first source code having a number of global storage objects, wherein the number of global storage objects are to be accessed by a number of threads during execution. The method also includes translating the first source code into a second source code. The translating includes adding initialization logic for each of the number of global storage objects. The initialization logic includes generating private copies of each of the number of global storage objects during execution of the second source code. The initialization logic also includes generating at least one cache object during the execution of the second source code, wherein the private copies of each of the number of global storage objects are accessed through the at least one cache object during execution of the second source code.